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EXAMINER

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Serial Number: 09/372,835
Filing Date: 08/12/1999
Appellant(s): Russell

Paper No. 23

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GROUP 2800

Mark Giarratana
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed March 21, 2002.

(1) Real Party In Interest.

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences.

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims.

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final.

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention.

The summary of invention contained in the brief is correct.

(6) Issues.

The appellant's statement of the issues in the brief is substantially correct except that the rejections based on the Zinreich patent are hereby withdrawn.

(7) Grouping of claims.

Appellant's brief at page 8 states that claims 20-61 stand or fall together.

(8) Claims appealed.

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of record.

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,193,106

Desena

03/09/93

(10) Grounds of Rejection.

The following ground(s) of rejection are applicable to the appealed claims.

Claims 20-61 are rejected under 35 U.S.C. § 103 as being unpatentable over DeSena. DeSena teaches a marker system and method comprising adhesive markers 3 bearing patterns formed of barium or aluminum (lines 11-13 of column 3). Lines 62-65 of column 4 suggest that the clarity of the patterns is controlled by their thickness, and It would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the thickness or % attenuation of the DeSena markers to provide the desired opacity under the specified parameters.

(11) Response to Argument.

The following response is directed to claim 20 since 20 is the first claim presented by appellant. It is noted, however, that claim 46 is broader than claim 20 and that page 8 of the brief declares that claims 20-61 stand or fall together.

Claim 20 is a method claim, but most of the limitations

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recited are to structural features of the marker. The steps of the method comprise:

providing a source of x-ray radiation capable of generating radiation suitable for imaging the tissue;

selecting a partially radiolucent, partially radiopaque marker having a radiographic density and thickness which permit the marker to both project a radiographic shadow and transmit sufficient radiation to image anatomic detail present in the tissue when the marker and the tissue are exposed to the x-ray radiation during radiographic examination;

positioning the marker between the source of x-ray radiation and the tissue;

exposing the marker and the tissue to the x-ray radiation, and generating a radiographic image of the tissue having the shadow of the marker superimposed thereon with the anatomical detail present in the tissue clearly visible through the radiographic shadow projected by the marker

Lines 35-39 of column 3 delineate these same steps. The issue to be resolved, then, is whether or not DeSena's marker is partially radiolucent, partially radiopaque (these terms mean the same thing and are akin to the well known phrase "a glass that is half full or half empty") and exhibits the features delineated by the rest of the claim.

The desired performance of DeSena's marker is outlined in lines 24-31 of column 1 and is the same as that defined in appealed claim 20:

Highlighting the area of interest with a marker that is easily seen on the radiograph focusses the podiatrist's attention and thus aids in determining the course of treatment. Failure to so mark the radiograph, or marking in such a way that even small portions of the area of interest are obscured may seriously hinder the diagnostic examination of the problem area.

This is the same goal claimed by appellant.

The other limitations are:

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1. the marker comprise one of aluminum, rubber, plastic and vinyl

Lines 11-13 of column 3 indicate that the marker be fabricated of aluminum.

2. the thickness of the marker is less than about 0.4 inches 62

DeSena does not prescribe a marker thickness but specifies that it be thin and flexible enough to follow the contour of a body part such as a toe (lines 13-19 of column 3). These characteristics would require an aluminum layer similar to aluminum foil used in kitchens which is much thinner than the 0.4 inches recited in claim 20 since a marker as thick as 0.4 inches would lack the requisite flexibility and would be too stiff to be useful.

3. the thickness of the marker is selected based upon the density of the tissue being examined and the energy of the radiation being applied to absorb from about 2% to about 75% of the incident radiation

The wide range of thickness/absorption claimed is a clear proclamation that the thickness is not critical and that it is subject to the whim of the radiologist. Nonetheless, lines 62-65 of column 4 of DeSena explain:

In the preferred embodiment said aluminum is deposited onto said adhesive tape 1 to a thickness *sufficient* to highlight an area of interest with clarity.

In other words, the degree of opacity or x-ray absorption is a function of the thickness of the deposited aluminum, and DeSena instructs that the thickness or absorption is just enough to make the marker visible in the image but not to obscure details should it inadvertently be placed over a vital region beneath the skin.

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Lines 24-32 of column 1 and lines 62-64 of column 4 clearly emphasize DeSena's desire that the marker not be so thick as to hide vital information. If DeSena knew beforehand what malady (its size and position) might lie beneath the skin at a suspected problem site, he would not have to take x rays. Nowhere does DeSena suggest that his markers obscure the image as alleged by appellant.

Appellant observes that DeSena refers to aluminum as "radiopaque" (lines 52-54 of column 4), but DeSena does not imply that aluminum blocks all radiation as asserted by appellant but simply that it is somewhat absorptive. X-ray absorption of a material is proportional to its weight (density), and we all know that aluminum is very light compared to lead, for example, which is famous for stopping x rays as in superman comics. After all, aluminum is one of the fundamental elements comprising the periodic table, and DeSena's aluminum is exactly the same as appellant's aluminum and cannot be any more opaque.

Contrary to appellant's assertion, the rejection does not suggest modifying the DeSena marker but rather that the DeSena marker is, in fact, the same as is recited in claim 20.

The commercial success advanced by appellant is not germane simply because the only limitation lacking in the DeSena disclosure is the specific statement that the marker must be less than 0.4 inches thick, and DeSena explicitly explains that the marker must be flexible, which means that it cannot be aluminum and be that

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thick. The "obviousness" issue here is not obviousness to modify a prior art device as argued by appellant but rather obviousness that the prior art device is the same as the device being claimed. Furthermore any commercial success may stem from marketing or other practices and totally unrelated to patentability.

For the above reasons, it is believed that the rejections should be sustained.

Craig E Church

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ART UNIT 2882

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